1/6-7/11 Bd. Wrkshop SJR Technical Report Deadline: 12/6/10 by 12 noon

City of Tracy 520 Tracy Boulevard Tracy, CA 95376

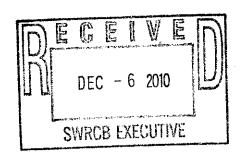
## PUBLIC WORKS DEPARTMENT

MAIN 209.831.4420 FAX 209.831.4472 www.ci.tracy.ca.us



December 6, 2010

Ms. Diane Riddle Senior Environmental Scientist State Water Resources Control Board 1001 I Street Sacramento, CA 95814



SUBJECT: Draft Technical Report on the Scientific Basis for Alternative San Joaquin River Flow and Southern Delta Salinity Objectives

Dear Ms. Riddle:

The City of Tracy (City) sincerely appreciates the opportunity to view and provide comments on the draft technical report entitled, "Scientific Basis for Alternative San Joaquin River Flow and Southern Delta Salinity Objectives," dated October 29, 2010 (Draft Technical Report). The City operates the Tracy Wastewater Treatment Plant, which discharges highly treated effluent to Old River in the Southern Delta. Additionally, the Southern Delta serves, in part, as the municipal drinking water supply for the City. The City of Tracy is deeply invested in the environmental stewardship of the Southern Sacramento - San Joaquin Rivers Delta (Southern Delta) and is potentially impacted by the decisions to be made in this matter.

The State Water Resources Control Board (State Water Board) is reevaluating both the San Joaquin River flow objectives and the Southern Delta salinity objectives. The Draft Technical Report is a presentation of the tools that the State Water Board will utilize in the final assessment of the appropriate San Joaquin River flow and Southern Delta salinity objectives. We have reviewed the Draft Technical Report and offer the following general comments and specific comments:

## **General Comments**

The Draft Technical Report is too limited in scope to the tools to be effectively used in the State Water Board's assessment of the flow at Vernalis and Southern Delta salinity. The regression model approach relating the salinity at Vernalis to the internal southern Delta compliance points will not assure full compliance of the salinity standards at the compliance points or throughout the southern Delta. Additionally, the flow objectives are applied only at Vernalis. A discussion should



be added to the report detailing how compliance with proposed salinity and flow standards within the southern Delta will be assessed and maintained. A comprehensive implementation plan required under Water Code section 13242 to achieve the proposed standards is lacking. Such a plan would provide a context for the tools presented in the report and allow further critique of their suitability for the assessment. The report would be well served to include a conclusion section outlining the proposed implementation plan for achieving the flow and salinity objectives.

At several locations within the document, statements are made that other factors and other measures are needed to protect fish and wildlife, which will be addressed through the Bay-Delta Plan revision process. However, the document fails to include a discussion regarding the other factors or other measures that may be addressed, or how they may be analyzed. As the technical support for the subsequent Substitute Environmental Document (SED) for the Bay-Delta Plan revisions, the Draft Technical Report should list these other factors and measures, and describe the tools to be used in their evaluation.

The Draft Technical Report contains little discussion about the method that the State Water Board intends to use in the determination of the level of flow at Vernalis necessary for the protection of fish and wildlife. As part of a conclusion section, the factors to be considered in the balancing of needs for water in the San Joaquin River Basin should be listed, together with information regarding how those factors would be weighted.

The report does not discuss the tools or methods to be used in the assessment of the economic impacts of modifying San Joaquin River flow objectives. Critical to a change in the water rights allowing the diversions to be reduced is an economic analysis demonstrating whether those reductions are in the best interest of the people of California.

The application of the models described in the Draft Technical Report assumes no change in dam operations and only assumes changes in diversions to satisfy the flow objectives. Due to water rights constraints, it is not likely that the diversions could be simply reduced to meet the flow objectives. The premise that the analysis is only needed to ensure that the physical volume of water exists to meet flow objectives at Vernalis should be re-examined, since it may underestimate the potentially available water. Even though the State Water Board cannot mandate the method of increasing flows in the San Joaquin River, the range of modified flow objectives called for in the report would likely result in re-operation of the dams to minimize the water supply impacts. For example, Section 5 outlines potential flow objective scenarios with up to a median 71% reduction and upper quartile 88% reduction of diversions within the San Joaquin River Basin. The report uses mass balance approaches to estimate the additional flows necessary to meet flow and salinity objectives at Vernalis. With potentially substantial changes in facility operations needed to provide required flows, the CALSIM II model should be rerun to ensure that the mass balance approach does not oversimplify the water balance in the San Joaquin River Basin and the resulting salinity estimates at Vernalis. The report should consider additional model analyses that include modified operation of dams to achieve an increased river flow and mitigated reductions in water rights.

## **Specific Comments**

On page 30, the following statement is made: "Operations of the CVP and SWP Delta export facilities are coordinated to meet water quality and flow standards set by the State Water Board, the U.S. Army Corps of Engineers (USACE), and by fisheries agencies." The City would point out that the operations of the CVP and SWP are currently under CDO WR 2006-0006 and WR 2010-0002 due to threatened exceedances of the electrical conductivity (EC) standards in the Southern Delta.

City of Tracy

Therefore, it is not accurate to state that the CVP and SWP are currently operated to meet water quality standards.

On page 57, the statement is made that, in the 2007 VAMP salmon tracking study, there was "...unexplained mortality near Stockton of a sizeable number of test fish..." It is our understanding that the mortality of salmon was investigated and found to be the result of predation. In fact the California Department of Fish and Game, Central Valley Regional Water Quality Control Board, Robertson-Bryan, Inc., and the San Joaquin River Authority Group all investigated the mortality of salmon near Stockton and found there was no link to treatment plant discharges or local water quality/salinity levels. The specific area where the transmitters stopped is a known holding area for predatory fish, and there were indications of predation as well as known predation at other sites. The City respectfully requests the language in the document be changed replacing the word "unexplained" with the words "predation-based".

On page 69, the statement is made, "The State Water Board based the southern Delta EC objectives on the calculated maximum salinity of applied water which sustains 100 percent yields of two important salt sensitive crops grown in the southern Delta (beans and alfalfa), in conditions typical of the southern Delta." However, as noted in the Hoffman report, the original methodology used to determine the South Delta EC objectives does not include consideration of precipitation. Precipitation is typical in the growing seasons of both beans and alfalfa in the southern Delta. Further, since even aquatic life criteria are not set to protect 100% of the most sensitive in-stream organisms, it is unclear why a 100% protection level would be maintained for off-stream agricultural uses.

Pages 76-77, Section 4.3.2 Effects on Municipal and Domestic Supply Beneficial Use, the City would recommend adding that the secondary MCLs are and should be applied on an annual average basis since these criteria are set for long term (70 years) of drinking water exposure.

Page 86, Table 5-1 lists the San Joaquin River Basin diversions in the CALSIM II model. We request that a description of those diversions be added to the table indicating the use of the diverted water. Are any of the listed diversions for municipal water supply? If there are municipal water supply diversions, it is unlikely that these could be reduced, especially in light of the fact that the analysis indicates that dryer years call for greater reductions in diversions, at times when water demand would be greatest. The report should state if any municipal water supplies are expected to be reduced under any scenario, and whether there would be available water without affecting municipal supplies. Please include a map showing the location of the listed diversions.

In conclusion, the Draft Technical Report provides a description of the tools used to assess the flow objective at Vernalis for protection of fish and wildlife and the flows required to maintain the selected EC objective in the Southern Delta. The regression model for salinity presented in the report will result in exceedances of selected standards at a frequency commensurate with the selected prediction interval of the model. However, there is no discussion in the report of how compliance with the salinity standard will be assessed or maintained within the southern Delta. The report is lacking a description of alternative plans to implement the tools, and the process to be followed as the objectives are defined and sources of water to fulfill the objectives are identified. The tools rely on the assumption that if there is physically enough water available to meet an objective, the water will be used to meet the objective. While the document does state that changes

City of Tracy

<sup>&</sup>lt;sup>1</sup> Hoffman, G. J. 2010. Salt Tolerance of Crops in the Southern Sacramento-San Joaquin Delta. January 2010.

in water rights will be considered in a subsequent adjudicative proceeding, the plan should include the reevaluation of possible flows and salinity objectives following the water rights process. A conclusion section, which outlines the method for determining the flow and salinity objectives at Vernalis and a proposed implementation plan for achieving the objectives, would be a valuable and necessary addition to the Draft Technical Report.

Again, the City appreciates the opportunity to provide these comments and looks forward to participating in this process as it moves forward.

Sincerely,

Steven G. Bayley

Deputy Director of Public Works for Utilities